

not exist; for though I myself have not been so fortunate as to find any specimens of ichneumon in their nests, one has been seen in them by Mr. Denison in several instances, and observed in all the stages of its growth. It is described by him as a fly, as large, or nearly as large, as the wasp itself; the head and fore part of the body black, the abdomen yellow, with a dark streak down the back; legs and wings black; upper wings dusky. This fly (*Rhipiphorus*) deposits its egg upon the grub of the wasp at the moment it assumes the pupa (*i. e.* spins or covers itself in the cell); as soon as the egg is hatched, it devours the grub of the wasp entirely, and itself assumes the pupa- and imago-form in the cell of the wasp."

XLVII.—*On certain nondescript Bones in the Skull of Osseous Fishes.* By GEORGE GULLIVER, F.R.S.

AFTER the much ado of late years about the osteology of the fish's head, it may seem surprising to announce undescribed cranial bones or ossicles in these animals. But that there are such pieces of the skull will probably be admitted by anatomists who may pay attention to the question.

A relation of the means by which these bones became known to me will show how and where they may be found; and this is the object of the present communication.

In separating and trying to put together again that segment of the fish's skull known as the frontal vertebra or prosencephalic arch, I have always found supernumerary bones—that is to say, besides all those usually given as composing that arch, a pair of neat ossicles, each of them thin, cup-shaped and subconical, somewhat triangular or subpyramidal, and measuring, in large codfish, about three-fourths of an inch across the base of the cone and in depth. The apex of each of the bones is rather obtusely pointed; and either of them, with its small end most deeply placed, occurs regularly, sunk into a pit, and easily separable therefrom in the boiled fish's head, at the hind part of each postfrontal.

The woodcut represents, of the natural size, one of these postfrontal ossicles, or *expostfrontals*, from a small codfish.



After a diligent search through the English books of comparative anatomy, I have been unable to discover any notice of the bones in question. And as they had so often puzzled me, I took them to London, on the 6th of August last, when and where they were compared with the admirable preparations of the skele-

tons of fishes in the Museum of the Royal College of Surgeons; but the search for any display or representation of the new bones in that great collection proved equally fruitless.

On the 4th of November succeeding, Mr. James Flower, the eminent articulator, kindly showed me dissections which, in consequence of my having submitted the new bones to his examination on the 4th of August preceding, he had recently made of the skull of the codfish. And I was gratified to learn that he had thus not only confirmed my discovery but added to it the discovery of other and similar bones. They are all of the squamous kind, and shaped something like small and deep limpet-shells, and occur, as before said, connected with the postfrontals and also with the squamosals or mastoids and the epiotics or paroccipitals; so that, on each side of the head, there is a short chain of the new bones sloping backwards from the postfrontal to the epiotic.

Provisionally, the postfrontal ossicles, one of which is now figured, may be called, from their situation and for convenience, *expostfrontals*.

A correct understanding of "the bones which enter into the composition of the skull of the fish" is said to be "the key to the composition of the skull of all Vertebrata." But now it seems that all these bones or pieces in fishes have not hitherto been recognized, much less understood; while it is obvious that, until every part of their skull has been estimated at its true value separately, as well as with its connexions in the species and homologies as regards other Vertebrata, no complete view can be given of this important part of osteology.

And, no doubt, now the profound practical knowledge of Mr. James Flower, to whom this science is so much indebted, has been directed to the facts, they will be so displayed in our national museum of anatomy as to afford, under the care of the excellent professor and conservator, every facility for further investigations.

Canterbury, Nov. 9, 1869.

XLVIII.—*Description of a new Species of Epeira.*

By JOHN BLACKWALL, F.L.S.

Epeira Mengii.

Length of the female $\frac{5}{8}$ of an inch; length of the cephalothorax $\frac{1}{10}$, breadth $\frac{1}{2}$; breadth of the abdomen $\frac{1}{8}$; length of an anterior leg $\frac{5}{8}$; length of a leg of the third pair $\frac{1}{6}$.

The cephalothorax is convex, glossy, compressed before,